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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/286,469	04/06/1999	ANNE O'CONNELL	922-48	5034

7590 08/12/2003  
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EXAMINER
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TRAN, THIEN D

ART UNIT	PAPER NUMBER
2665	10

DATE MAILED: 08/12/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/286,469

Applicant(s)

O'CONNELL, ANNE

Examiner

Thien D Tran

Art Unit

2665

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 June 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Regarding claim 1, the specification does not disclose "a pointer table of which the entries each comprise a network address and an associated pointer to and to an entry in the said data table".

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being participated by Michels et al (U.S Patent No 6,161,144) in the view of Sekine et al (U.S Patent No 6,101,188).

Regarding claims 1 Michels discloses a network switch for a packet-based data communication network, comprising a plurality of ports for the reception and transmission of data packets and means for establishing a lookup table (database) for controlling the passage of data packets between the ports, the lookup table comprising a data table for holding data entries each comprising a pointer table pointing to the table of network address and port number. See figure.4, figure.9, col.7 lines 35-65, col.11 lines 25-45.

Regarding claim 2, Michels discloses a network switch having the pointers associated in said pointer table with network. See col.11 lines 25-45.

Regarding claims 3, 5 Michels discloses a network switch including means for hashing network addresses of said packets to access said pointer table. See col.3 lines 40-45.

Regarding claim 4, Michels discloses a method of operating a network switch in a packet-based data communication network, wherein the network switch has a multiplicity of ports each connected to a respective group of remote stations by way of an intermediate network device, the network switch responding to network addresses in packets received by the network switch to look up in a data table a media access control address for the respective intermediate device (col.6 lines 20-55), said method comprising:

(a) responding to a network address of an incoming packet to access a pointer table of which the entries each include a network address and an address pointer, the address pointer identifying an entry in said data table (col.7 lines 35-65), and

(b) causing the address pointers for all the network addresses of remote stations coupled to the switch by way of the same intermediate device to identify a single common entry for that device in said data table (col.11 lines 25-45).

Regarding claim 6, Michels discloses a network switch for a packet-based data communication network, comprising a plurality of ports for the reception and transmission of data packets which include network address data and media access control address data, comprising:

a memory (database) for controlling the passage of data packets between the ports, the database comprising a first data table for holding data entries each comprising a network address; and

means for accessing said first data table in response to network address data in said packets; and

further comprising a second data table containing entries comprising forwarding data including a destination media access control address; wherein:

said entries in the first data table each include a pointer to an entry in said second data table. See col.11 lines 25-45.

Regarding claim 7, Michels discloses a network switch, wherein the pointers associated in said first data table with network addresses which share a common media access control address in said switch all identify a single common entry in said second data table. See figure 9.

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Regarding claim 8, Michels discloses a network switch according, wherein said means for accessing comprises means for hashing network address data of said packets to access said first data table. See figure 4A and figure 5.

Regarding claim 9, Michels discloses a network switch for a packet-based data communication network, comprising a plurality of ports for the reception and transmission of data packets which include network address data and media access control address data, comprising:

a database for controlling the passage of data packets between the ports, the database comprising first and second data tables, wherein:

said first data table holds data entries each comprising a network address and a pointer to an entry in said second data table; and

said second data table contains data entries each including a destination media access control address and an identification of a port;

whereby different entries in said first data table can contain pointers to the same data entry in said second data table. See col.9 lines 30-65.

Regarding claim 10, Michels discloses network switch for a packet-based data communication network, comprising a plurality of ports for the reception and transmission of data packets which include network address data and media access control address data, comprising:

a database for controlling the passage of data packets between the ports, the database comprising first and second data tables, wherein:

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said first data table is accessible in response to network address data in said data packets and holds data entries each comprising a network address and a pointer to an entry in said second data table; and

said second data table contains data entries each including a destination media access control address and an identification of a port;

whereby different entries in said first data table can contain pointers to the same data entry in said second data table. See col.10 lines 35-60.

Regarding claim 11, Michels discloses a network switch further comprising hashing said network address data in said packets to access said first data table. See col.11 lines 30-40.

Michels does not disclose a pointer table of which the entries each comprise a network address and an associated pointer to an entry in the said data table, which comprises media access control address and an identification of a port.

However, it would have been obvious to one having ordinary skill in the art, because Sekine (figures 8 and 10), for example, discloses pointers pointing to the table of MAC addresses along with network addresses associated with MAC addresses. Therefore, having a pointer table of which the entries each comprise a network address and an associated pointer to an entry in the said data table, which comprises media access control address and an identification of a port is inherent in the system of Skine and so that the routing can be processed more efficient.

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***Conclusion***

5. Any inquiry concerning this communication or earlier communication from the examiner should be directed to Thien Tran whose telephone number is (703) 308-4388. The examiner can normally be reached on Monday-Friday from 8:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Huy Vu, can be reached on (703) 308-6602. Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Thien Tran



**ALPUS H. HSU  
PRIMARY EXAMINER**